

Smokers' Anaesthesia

Smoking is a personal and social hazard worldwide that is frequently overlooked. In developed part of the globe the habit has shown a recent down trend, but unfortunately in developing nations it is yet on a rising trend. What is more appalling is that, raw and less refined tobacco is sold in these countries. Though there is govt rule firing for smoking in public place, seldom it is implemented. With limited govt. and NGO initiative at least the affluent part of society is aware of the harmful effect of smoking. Malignancy, hypertension, IHD, DM renal disease, airway infection, bronchial asthma all are worsened by smoking. Active smoking is responsible for 90% of lung cancer, smokers shows 20 fold rise of lung cancer¹. Smoking related risk of squamous cell carcinoma and small cell carcinoma is more than adenocarcinoma². But people irrespective of strata are not aware of the surgico anaesthetic hazard of smoking. Much needed to be done by govt, NGO, mass media and BSA as well to make people conscious of the magnitude effect of smoking in this field. BSA in the light of ASA guideline of quitting smoking(available at www.smokefree.gov) may chalkout its own smoking abstinence program.

Poor surgical healing, delayed and poor anaesthetic recovery, high carboxy haemoglobin causing hypoxia refractory to oxygen therapy³. Perioperarive airway spasm, retention of sputum leading to focal to global pulmonary collapse all should be taken into account. People should be motivated that everyone is vulnerable to undergo anaesthesia at some stage of life. Patient scheduled for an upcoming surgery should be motivated to abstain for good. At least 3 weeks abstinence can correspond with half life of already circulating CO. A prospective study on 6026 patients undergoing GA comparing smokers(S) to non smokers(NS) showed significant high ICU transfer in former⁴. Delgado study demonstrated Increased ICU admission and more death in smokers in a sample of 2989 patients⁵. Schwilk study in 26961 surgical patients shows relative risk (RR) or respiratory events 2.3 in young smokers, 6.3 in overweight smokers, while RR of

bronchospasm is 25.7 in young with COPD⁶. Moller randomized study demonstrates cardiovascular complication 0% & 10% while overall complication 15% & 52% in S versus NS⁷. In another series on surgical wound healing complication were 2% & 12% in nonsmoker and smoker group⁸. Necrosis of mastectomy scrap were smokers 7%. Meta analysis of vascular by-pass in a randomized trial showed significant by pass failure in smokers¹⁰.

Conclusion:

It is now fairly evident that added to non surgicoanaesthetic complication of malignancy, cardio-reno-pulmonary complication smokers has more valnurability to poor recovery, delayed healing, hypoxia. atelactasis, airway spasm etc. Surgery is therefore a good opportunity on the part of anaesthtist to motivate patient to abstain from smoking permanently. It is also high time that social conscience about perioperative health hazads is raised by launching combined effort from govt.ngo,media and health professionals.

Prof. Munirul Islam

Head of Anaesthesiology

Mymensingh Medical College, Mymensingh

(Journal of BSA, 2009; 22(2): 38-39)

References:

1. Alberg et al epidemiology of lung cancer. Chest 03;123:21-49.
2. Wyender et al: Smoking releted risk of lung cancer Cancer 1988;62:1223-30.
3. Moller et al:A study of impact of long term smoking on post operative intensive care admission;Anesthsia 2003Jan 50.
4. Delgado et al:A prospective study of tobacco smoking and prediction of complication following sutgery:In feet contr.hosp.epidiomo 12003:Jan 24.
5. Myles et al : Risk of respiratory complication in smokers following surgy:Anesthesiology 2002,97(4) 842-847.

6. Schwilk et al: Perioperative respiratory complication in smokers versus non smokers undergoing GA: *Acta anaesthesiologica* 1997;41 (3) 348-58.
7. Moller et al: Effect of preoperative smoking on post operative complication. *Lancet* 2002 Jan 12 114-17.
8. Sorensen et al: Abstinence from smoking decreases incidence of wound infection, randomized control trial *Acta surg.* 2003 Jul 1-5.
9. Padubidri et al: Complication following breast reconstruction in smokers, non smokers and ex smokers; *Plast. reconst. surg.* 2001 Feb 342-48
10. Willigendal et al: Smoking and patency of lower extremity bypass graft; *J vas.surg.* 2005 Jul, 42; 67-74.